Amendment and Response dated March 1, 2006 Reply to a Final Office Action of September 2, 2005

Docket No.: 760-117 RCE

Page 2

Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the subject application, and please amend the claims as follows:

Claim 1. (previously presented) A stent-graft endoprosthesis comprising:

a seamless tubular graft of biocompatible polymeric material having a wall thickness defining a luminal surface and an exterior surface;

a radially expandable coated stent securably, circumferentially and axially disposed over said exterior surface, wherein said coated stent is coated with said biocompatible polymeric material, said stent being a metallic stent having an open lattice tubular structure;

wherein said biocompatible polymeric material consists essentially of poly-para-xylylene having a formula of

$$\begin{array}{c|c} & (R)_x & \\ Y & & Y \\ C & & C \\ Y & & Y \end{array}$$

wherein n is from about 10 to about 10,000,

x is from 0 to 4,

R, which can be the same or different, is alkyl, aryl, alkenyl, amino, cyano, carboxyl, alkoxy, hydroxylalkyl, carbalkoxy, hydroxyl, nitro, chlorine, bromine, iodine and fluorine, and

Y, which can be the same or different, is hydrogen, chlorine, bromine, iodine and fluorine.

Claim 2. (original) The endoprosthesis of claim 1 wherein Y is hydrogen, x is from 0 to 2 and, when x is 1 or 2, R is chlorine.

Amendment and Response dated March 1, 2006 Reply to a Final Office Action of September 2, 2005

Docket No.: 760-117 RCE

Page 3

Claim 3. (previously presented) An implantable stent-graft device comprising:

a seamless and self-supporting tubular non-textile graft of biocompatible polymeric material having a wall thickness of about 10 microns to about 100 microns defining a luminal surface and an exterior surface; and

a radially expandable stent securably disposed over portion of said exterior surface, said stent being a metallic stent having an open lattice tubular structure.

Claim 4. (original) The device of claim 3 wherein said wall thickness is from about 10 microns to about 50 microns.

Claim 5. (original) The device of claim 3 wherein said polymeric material comprises poly-para-xylylene having a formula of

$$- \begin{bmatrix} Y & & & Y & \\ \vdots & & & \ddots & \\ Y & & & Y & \\ Y & & & Y & \\ \end{bmatrix}_n$$

wherein n is from about 10 to about 10,000,

x is from 0 to 4,

R, which can be the same or different, is alkyl, aryl, alkenyl, amino, cyano, carboxyl, alkoxy, hydroxylalkyl, carbalkoxy, hydroxyl, nitro, chlorine, bromine, iodine and fluorine, and

Y, which can be the same or different, is hydrogen, chlorine, bromine, iodine and fluorine.

Claim 6. (original) The endoprosthesis of claim 5 wherein Y is hydrogen, x is from 0 to 2 and, when x is 1 or 2, R is chlorine.

Amendment and Response dated March 1, 2006 Reply to a Final Office Action of September 2, 2005

Docket No.: 760-117 RCE

Page 4

Claim 7. (original) The endoprosthesis of claim 5 wherein said stent is coated with said poly-para-xylylene.

Claim 8. (previously presented) A stent-graft endoprosthesis comprising:

a seamless tubular non-textile graft of biocompatible polymeric material having a wall thickness of about 10 microns to about 250 microns defining a luminal surface and an exterior surface; and

a radially expandable stent securably disposed over portion of said exterior surface, said stent being a metallic stent having an open lattice tubular structure;

wherein said polymeric material comprises a poly-para-xylylene having a formula of

$$\begin{array}{c|c} & (R)_x & \\ Y & & Y \\ C & & C \\ Y & & Y \end{array}$$

wherein n is from about 10 to about 10,000,

x is from 0 to 4,

R, which can be the same or different, is alkyl, aryl, alkenyl, amino, cyano, carboxyl, alkoxy, hydroxylalkyl, carbalkoxy, hydroxyl, nitro, chlorine, bromine, iodine and fluorine, and

Y, which can be the same or different, is hydrogen, chlorine, bromine, iodine and fluorine.

Claim 9. (original) The endoprosthesis of claim 8 wherein Y is hydrogen, x is from 0 to 2 and, when x is 1 or 2, R is chlorine.

Claim 10. (original) The endoprosthesis of claim 8 wherein said stent is coated said polypara-xylylene.

Amendment and Response dated March 1, 2006 Reply to a Final Office Action of September 2, 2005

Docket No.: 760-117 RCE

Page 5

Claim 11. (previously presented) A stent-graft endoprosthesis comprising:

a seamless tubular non-textile graft of biocompatible polymeric material having a wall thickness defining a luminal surface and an exterior surface; and

a radially expandable stent securably disposed over a portion of said exterior surface, said stent being a metallic stent having an open lattice tubular structure;

wherein said polymeric material consists essentially of a poly-para-xylylene having a formula of

$$- \begin{bmatrix} Y & & & & \\ Y & & & & \\ C & & & & \\ Y & & & & \end{bmatrix}_n$$

wherein n is from about 10 to about 10,000,

x is from 0 to 4,

R, which can be the same or different, is alkyl, aryl, alkenyl, amino, cyano, carboxyl, alkoxy, hydroxylalkyl, carbalkoxy, hydroxyl, nitro, chlorine, bromine, iodine and fluorine, and

Y, which can be the same or different, is hydrogen, chlorine, bromine, iodine and fluorine.

Claim 12. (original) The endoprosthesis of claim 11 wherein Y is hydrogen, x is from 0 to 2 and, when x is 1 or 2, R is chlorine.

Claim 13. (original) The endoprosthesis of claim 11 wherein said wall thickness is from about 10 microns to about 250 microns.

Claim 14. (original) The endoprosthesis of claim 11 wherein said stent is coated with said poly-para-xylylene.

Amendment and Response dated March 1, 2006 Reply to a Final Office Action of September 2, 2005

Docket No.: 760-117 RCE

Page 6

Claim 15. (original) The endoprosthesis of claim 11 further comprising a second seamless tubular graft of said polymeric material having a wall thickness defining an interior surface and an exterior surface; wherein said second graft is securably disposed over said stent to form an outer polymeric cover thereover.

Claim 16. (previously presented) A method for producing a stent-graft endoprosthesis comprising:

providing a mandrel having a cylindrical outer surface;

depositing a poly-para-xylylene polymer onto a portion of said outer surface of said mandrel to form a tubular polymeric graft having a wall thickness defining a luminal surface and an exterior surface of said graft;

providing a radially expandable metallic stent having an open lattice tubular structure; and

securing portions of said stent to portions of said outer surface of said graft to form said stent-graft endoprosthesis.

Claim 17. (original) The method of claim 16 wherein said poly-para-xylylene polymer comprises a polymer having a formula of

$$\begin{array}{c|c}
 & & & \\
Y & & & \\
C & & & \\
Y & & & \\
Y & & & \\
\end{array}$$

$$\begin{array}{c|c}
 & & Y & \\
C & & \\
Y & & \\
\end{array}$$

$$\begin{array}{c|c}
 & & \\
Y & & \\
\end{array}$$

wherein n is from about 10 to about 10,000,

x is from 0 to 4,

R, which can be the same or different, is alkyl, aryl, alkenyl, amino, cyano, carboxyl, alkoxy, hydroxylalkyl, carbalkoxy, hydroxyl, nitro, chlorine, bromine, iodine and fluorine, and

Y, which can be the same or different, is hydrogen, chlorine, bromine, iodine and fluorine

Amendment and Response dated March 1, 2006 Reply to a Final Office Action of September 2, 2005

Docket No.: 760-117 RCE

Page 7

Claim 18. (original) The endoprosthesis of claim 17 wherein Y is hydrogen, x is from 0 to 2 and, when x is 1 or 2, R is chlorine.

Claim 19. (original) The method of claim 16 further comprising: coating said stent with said poly-para-xylylene polymer.

Claim 20. (original) The method of claim 16 wherein said securing includes adhesive bonding, thermal fusing; solvent fusing and mechanical attaching.

Claim 21. (original) The method of claim 16 wherein said depositing further comprises depositing said poly-para-xylylene polymer until said thickness is from about 10 microns to about 250 microns.

Claim 22. (original) The method of claim 16 wherein said depositing further comprises: providing a poly-para-xylylene source dimer material; vaporizing said dimer material; pyrolyzing said dimer material to yield poly-para-xylylene precursors; vapor depositing said precursors onto said mandrel; and polymerizing said precursors to yield said poly-para-xylylene polymer.

Claim 23. (original) The method of claim 22 wherein said poly-para-xylylene precursors are selected from the group consisting of di-para-xylylene, di-chloro-di-para-xylylene, tetra-chloro-di-para-xylylene and combinations thereof; and further wherein said poly-para-xylylene polymer is selected from the group consisting of parylene C, parylene D, parylene N and combinations thereof.

Amendment and Response dated March 1, 2006 Reply to a Final Office Action of September 2, 2005

Docket No.: 760-117 RCE

Page 8

Claim 24. (original) The method of claim 16 further comprising removing said graft from said mandrel.

Claim 25. (original) The method of claim 16 further comprising removing said stent-graft endoprosthesis from said mandrel.

Claim 26. (original) The method of claim 16 said providing said radially expandable stent further comprises:

radially expanding said stent; and positioning said radially expanded stent over said graft.

Claim 27. (previously presented) A method for producing a stent-graft endoprosthesis comprising:

providing a tubular graft of vacuum vapor deposited poly-para-xylylene polymer;
providing a radially expandable metallic stent having an open lattice tubular structure;
and

securing portions of said stent to portions of said outer surface of said graft to form said stent-graft endoprosthesis.

Claim 28. (original) The method of claim 27 wherein said polymer is selected from the group consisting of parylene N, parylene D, parylene C and combinations thereof.

Claim 29. (previously presented) An endoprosthesis consisting essentially of: a seamless tubular non-textile graft of biocompatible polymeric material having a wall thickness of about 10 microns to about 250 microns defining a luminal surface and an exterior surface;

wherein said polymeric material is a poly-para-xylylene having a formula of

Amendment and Response dated March 1, 2006 Reply to a Final Office Action of September 2, 2005

Docket No.: 760-117 RCE

Page 9

$$\begin{array}{c|c}
 & (R)_x \\
Y & \downarrow & Y \\
C & \downarrow & C \\
Y & & Y
\end{array}$$

wherein n is from about 10 to about 10,000,

x is from 0 to 4,

R, which can be the same or different, is alkyl, aryl, alkenyl, amino, cyano, carboxyl, alkoxy, hydroxylalkyl, carbalkoxy, hydroxyl, nitro, chlorine, bromine, iodine and fluorine, and

Y, which can be the same or different, is hydrogen, chlorine, bromine, iodine and fluorine.

Claim 30. (original) The endoprosthesis of claim 29 wherein Y is hydrogen, x is from 0 to 2 and, when x is 1 or 2, R is chlorine.

Claims 31-32. (canceled)